



## ***San Juan Citizens Alliance***

*A voice for environmental, social, and economic justice in the San Juan Basin of southwest Colorado and northwest New Mexico*

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### **AIR QUALITY EFFECTS IN THE FOUR CORNERS REGION – THE NEED FOR MANDATORY CONTROL MEASURES AND ENFORCEABLE ACTION**

San Juan Citizens Alliance (SJCA) has been actively involved in the Four Corners Air Quality Task Force (4CAQTF) and the earlier New Mexico Environment Department (NMED) Ozone Task Force, since inception in 2002. SJCA offers the following suggestions of what needs to be done for air quality in the Four Corners region and how the 4CAQTF can support our efforts:

1. The latest *Four Corners Air Quality Task Force Draft Report of Mitigation Options* (Version 5, January 10, 2007) will provide the basis for the primary work product for the 4CAQTF completion by December 2007. These mitigation options would then be utilized to implement voluntary measures to reduce emissions of air pollutants in the Four Corners region. SJCA has significant concerns that the lack of mandatory control measures and enforceable actions for reducing air pollution will delay (many years beyond the life of the 4CAQTF) quantifiable progress in improving air quality in the Four Corners region. Given the jurisdictional challenges of air quality oversight in the Four Corners region, it is imperative that the 4CAQTF completion results in an Action Plan that examines cumulative air pollutant emission inventories with implementation of mandatory control measures now (particularly for coal-fired power plants and natural gas production).

2. Federal agencies in the Four Corners region have emphasized reliance on the 4CAQTF (and the earlier Ozone Task Force) as the means to provide air quality mitigation (including monitoring, modeling and control measures). For example, the Bureau of Land Management (BLM), Farmington Field Office (FFO) Resource Management Plan (RMP)/Final Environmental Impact Statement (FEIS) 2003 places the onus on the 4CAQTF as the solution to avoid significant air quality impacts from oil and gas, coal and other source projects that are approved by the BLM (see Attachment A). From 2003-2007, the BLM/FFO has avoided implementation of mandatory control measures for reduction of air pollution control measures while approving new oil and gas facilities that often require wellhead or central compression. The BLM/FFO RMP states that 73,565 tons per year of nitrogen oxides (NO<sub>x</sub>) is to be expected in the year 2023 from natural gas production (over 12,000 wellhead compressors) in the FFO alone. This is more NO<sub>x</sub> than PNM San Juan Generating Station and APS Four Corners coal-fired power plants currently emit, combined. SJCA supports increased emphasis on conducting air quality emissions inventories [such as the Ozone Precursors Emission Inventory For San Juan And Rio Arriba Counties, New Mexico, August 2006 which shows high contributions to Volatile Organic Compounds (VOCs) from natural gas production]. VOCs and NO<sub>x</sub> equal ozone.

3. It is essential that improved monitoring of air pollution emissions occur in the Four Corners region. We need more monitors and properly located monitors to accurately determine emissions including carbon dioxide (CO<sub>2</sub>), mercury (Hg), ozone (O<sub>3</sub>) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) that are disproportionately high in the Four Corners region (from the coal-fired power plants and other industrial activity).

4. San Juan County, the Cities of Aztec, Bloomfield, and Farmington, the New Mexico Environment Department (NMED), and the Environmental Protection Agency (EPA) signed the San Juan County Early Action Compact (EAC) on December 20, 2002. The EAC entails milestones through 2007 that are designed to keep San Juan County in attainment of the federal standard for ground-level ozone. If San Juan County cannot remain in attainment for ozone, there would certainly be significant economic and environmental repercussions. It is important to note that the EAC did not require specific emission control measures to reduce emissions of precursors of ozone.

5. The emphasis on air pollution emissions reduction for coal and natural gas facilities should be on upfront design for pollutant source reduction rather than reliance on mitigation measures (including retrofits for pollution control).

6. The EPA regions 6, 8 and 9 must work together (with state and tribal agencies) to oversee air quality emissions in the Four Corners region, which are fragmented by jurisdictional boundaries. Significant existing, proposed and projected projects [including the Southern Ute Indian Tribe (SUIT) Coal Bed Methane Gas Field Expansion Project EIS, the BLM/FFO RMP reasonable foreseeable development of 10,000 new natural gas facilities in correlation with existing development, the Northern San Juan Basin Coalbed Methane Development EIS, the San Juan Generating Station, the Four Corners Power Plant] must be analyzed comprehensively for air pollution emissions.

7. SJCA respectfully requests the opportunity for public citizen review and comment on all final 4CAQTF work products with peer review from the scientific community.

8. Certain mitigation options identified by the 4CAQTF may not be acceptable due to requirements mandated in federal/tribal/state rules and regulations. For example, timing restriction waivers for natural gas production in wildlife areas is not acceptable as a proposed mitigation option that a Federal agency has already specified as required in a planning document. SJCA opposes any exceptions to or waivers from lease stipulations or permit conditions of approvals for oil and gas drilling pertaining to seasonal drilling restrictions enacted to protect wildlife on public lands. These restrictions are based on scientific research and are the results of lengthy planning processes with stakeholder involvement. It is critical to remember that BLM and National Forest Service lands are to be managed for multiple use – one of which is wildlife (per the guidance of the planning documents - RMPs and Forest Plans), not exclusively for oil and gas. The proposal for this relaxation of restrictions may be found under the "Mitigation Option: Lease and Permit Incentives for Improving Air Quality on Public Lands" on p. 107 in the *Four Corners Air Quality Task Force Draft Report of Mitigation Options* (Version 5, January 10, 2007). We believe it is especially inappropriate to offer such proposals that will most certainly negatively impact wildlife resources in the setting of this task force whose purpose is to address air quality issues. Because of the task force's name, many who are concerned about the impact of oil and gas activities on wildlife will be unaware that this proposal has become a part of the draft.

9. SJCA requests that the 4CAQTF assist citizens in acquiring complete public health records for the Four Corners region concerning rates of human respiratory illness (including asthma), strokes, heart attacks and autism in comparison to other communities in the United States. It is particularly important that the historic health records in the tribal areas (including Navajo Nation, Southern Ute, Ute Mountain Ute) be obtained from Indian Health Service since current and future planned emissions in the Four Corners region severely impact tribal lands.

10. SJCA is opposed to cap and trade policies for mercury and other allowances for air pollution emissions in the Four Corners region, which could result in emission "hotspots" (with particular concern over mercury).

## ATTACHMENT A

**Record of Decision – Farmington Resource Management Plan (RMP) and Final Environmental Impact Statement (FEIS), U.S. Department of Interior, Bureau of Land Management (BLM), Farmington Field Office (FFO), 2003.**

### **E. Management Considerations**

Based on the amount of public interest in air quality issues, particularly ozone levels, the following management considerations were additional factors in the decision to adopt the air quality mitigating measures shown below.

In the Proposed Resource Management Plan (PRMP)/FEIS, potential air quality impacts using an extremely conservative analysis under Alternative D were: 1) potential violation of the 24-hour nitrogen dioxide New Mexico Ambient Air Quality Standard; 2) potential exceedance of the nitrogen dioxide PSD Class II Increment; 3) potential exceedance of the California short-term (chronic) Hazardous Air Pollutant Reference Exposure Level for acrolein; 4) assumed violation of the 8-hour ozone National Ambient Air Quality Standard; 5) assumed exceedance of the nitrogen dioxide PSD Class I Increment within Mesa Verde National Park, Weminuche Wilderness Area, and San Pedro Parks Wilderness Area mandatory federal PSD Class I areas; and 6) assumed significant visibility impacts within Mesa Verde National Park, Weminuche Wilderness Area, and San Pedro Parks Wilderness Area mandatory federal PSD Class I areas.

Monitoring conducted by the New Mexico Environment Department Air Quality Bureau (NMAQB) indicates that ozone levels in the San Juan River Valley have approached Clean Air Act non-attainment levels for ozone. **However, insufficient scientific data is available to separate local versus regional sources of the precursors that form ozone. A Four Corners Ozone Task Force has been formed to develop strategies to further analyze and address the problem. The BLM is a member of the Task Force steering committee and has submitted a funding request to support additional air quality monitoring and modeling. The NMAQB has contracted for additional monitoring studies beginning this summer. Based on the results of monitoring and additional modeling, the BLM may require mitigation to reduce oil- and gas-related impacts to air quality. Local governments in San Juan County and the New Mexico Environment Department have entered into an Early Action Compact (EAC) with the Environmental Protection Agency. The EAC group will identify emission control measures to reduce ozone precursors and finalize an emissions reduction process in a Clean Air Action Plan (CAAP) that they propose to submit to the EPA for review by March 31, 2004. The BLM will use the proposed control measures as the basis for air quality mitigation. With the additional mitigation, BLM expects that significant impacts to air quality will be avoided and that oil and gas operations will meet all applicable air quality standards.** (bold for emphasis)

### **F. Mitigation Measures**

#### **Air Quality**

Potential air quality impacts will require special mitigation. All air pollutant emissions from future federally conducted or approved activities under the Farmington RMP shall comply with all applicable local, state, tribal, and federal air quality laws, statutes, regulations, standards, and implementation plans. The air quality analysis produced for the Farmington Proposed RMP/FEIS

updates the amended 1988 Farmington RMP air quality analysis on a cumulative basis for the region. Unless ongoing monitoring and additional modeling indicate otherwise, the following mitigation measures are required:

**1. Emissions Control (Construction)** – The PRMP/FEIS determined that significant air quality impacts would not occur during construction based on a detailed analysis performed for the “Southern Ute Indian Tribe (SUIT) Coal Bed Methane Gas Field Expansion Project EIS” (BLM 2002). However, the SUIT analysis assumed that no more than four wells would be constructed concurrently, each within one-half mile proximity to another. Since the Farmington RMP allows for more dense well development (i.e.; one-quarter mile proximity), construction shall be limited to only four wells concurrently in any given square mile, with each well no closer than one-half mile to another. This measure is necessary to assure construction impacts will comply with applicable air quality regulations.

**2. Emissions Control (Wellhead/Field Compressors)** – If appropriate control measures that can be applied as mitigation measures have not been recommended through the Clean Air Action Plan process by July 1, 2004, interim mitigation will be instituted. New and replacement wellhead compressors will be required to limit their NO<sub>x</sub> emissions to less than 10 grams per horsepower-hour. This requirement would apply to all new and replacement compressor engines, unless the proponent can demonstrate (using air pollutant dispersion modeling) that a specific higher emission rate would not cause or contribute to an exceedance of any ambient air quality standard. This measure is intended to substantially reduce the level and extent of project emissions to form ozone throughout the project region. Implementation of this measure would also eliminate the predicted significant near-field 24-hour nitrogen dioxide impacts (to the 24-hour nitrogen dioxide New Mexico Ambient Air Quality Standard and annual nitrogen dioxide PSD Class II Increment, as well as the assumed 8-hour ozone National Ambient Air Quality Standard, PSD Class I increment and visibility impacts in downwind mandatory federal PSD Class I Areas) estimated to occur from project emission sources, as presented in the Proposed RMP/FEIS.

**3. Emissions Control (Sales/Pipeline Compressors)** – If appropriate control measures that can be applied as mitigation measures have not been recommended through the Clean Air Action Plan process by July 1, 2004, interim mitigation will be instituted requiring that each sales (pipeline) compressor station added to the planning area shall limit its total nitrogen oxides emissions to less than 1.5 grams per horsepower-hour. This requirement applies to all new and replacement compressor engines, unless the proponent can demonstrate (using air pollutant dispersion modeling) that a specific higher emission rate would not cause or contribute to an exceedance of applicable air quality regulations. Again this measure would reduce the potential for significant impacts to air quality.

**4. Participation on the Four Corners Regional Ozone Task Force** – The BLM shall continue to participate in the Four Corners Regional Ozone Task Force, in order to continue its support of the San Juan County EAC with local governments in San Juan County, the New Mexico Environmental Department, and the Environmental Protection Agency. The EAC process will study ozone formation processes in the region and determine the effects that future growth will have in order to ensure that the area continues to comply with the national 1- and 8-hour ozone standard in San Juan County. It is anticipated that the EAC group will finalize the emissions reduction process in a Clean Air Action Plan (CAAP) that they propose to submit to the EPA for their review by March 31, 2004. Therefore, project emission sources may be subject to future CAAP emission control measures that are more stringent than the nitrogen oxides emission mitigation limits identified above. Additionally, as the Ozone Task Force makes specific recommendations, the BLM will incorporate those recommendations within its legal authority as mitigation measures under 43 CFR 3162.1. Finally, BLM shall assist the NMAQB and EPA to monitor actual ozone conditions throughout the EAC

process. Implementation of this measure is intended to prevent assumed future violations of the 8-hour ozone National Ambient Air Quality Standard, as presented in the PRMP/FEIS.

**5. Expanded Regional Cumulative Air Quality Impact Assessment** – BLM shall perform a regional cumulative far-field analysis of potential PSD Class I increment, atmospheric deposition, and visibility impacts as part of the planned “Northern San Juan Basin Coalbed Methane Development EIS” air quality impact assessment. Implementation of this measure is intended to further define potential regional cumulative air quality impacts at down-wind mandatory federal PSD Class I Areas based on assumed development patterns under the Farmington PRMP/FEIS. Based on the outcome of the regional analysis, additional mitigation may be required.